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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,443	01/22/2002	Rebecca Klotzer	3568.076	7553
152	7590	04/07/2004	EXAMINER	
CHERNOFF, VILHAUER, MCCLUNG & STENZEL 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204-3157			DEL SOLE, JOSEPH S	
		ART UNIT	PAPER NUMBER	
		1722		

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/058,443	KLOTZER, REBECCA
	Examiner Joseph S. Del Sole	Art Unit 1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 12-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 12 and 15-17 is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) 13 and 14 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. 09/642,390.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, coolable pump heads (claim 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. These features are mentioned in the original claims, however the specification does not mention them, and thus it is not clear that the drawing shows them. The specification should be amended to incorporate discussion of coolable pump heads, without adding new matter, and reference should be made to its relationship to the drawings.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

2. Claims 13 and 14 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 only recites that the heat exchanger is equipped with a mixer, however parent claim 12 recites "a heat exchanger located between said first melt pump and said die to form a second mixing stage" therefore since the heat exchanger forms a mixing stage it is clear that the heat exchanger is equipped with a mixer and claim 13 is not further limiting.

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***Allowable Subject Matter***

3. The subject matter of claims 12-17 is allowed.
4. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or suggest the combination of elements claimed in claim 12, including an extruder with heating elements connected via a first melt pump to a die and having an injection stage before the first melt pump for charging with a cell former and further a heat exchanger located between the first melt pump and the die to form a second mixing stage wherein a second melt pump is located upstream from the die. The Examiner would like to indicate that the extruder is interpreted as the first mixing stage because it forms a polymer melt and furthermore, the second melt pump is interpreted as being immediately upstream from the die and therefore downstream of the heat exchanger. The closest prior art, Siggel et al (4,164,603) fails to teach an injection stage before the first melt pump and fails to teach a heat exchanger between two pump. Similarly, Kolossow (4,615,664) fails to teach a second pump immediately downstream of the die and fails to teach a heating mechanism.

***References of Interest***

5. Schwarz (3,627,867), Harris (4,613,471), Bullard et al (4,476,077), Hildebolt (4,039,691) and Sherman et al (4,613,627) are cited of interest to show the state of the art.

***Conclusion***

6. This application is in condition for allowance except for the following formal matters:

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Claim 13 should be cancelled because it is not further limited (the dependency of claim 14 would have to also be corrected and the claim would have to be amended to read --wherein said second mixing stage is a static mixer--). The drawings and specification must also be corrected to account for the coolable pump heads as claimed.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

#### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (571) 272-1151. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

*Joseph S. Del Sole*  
J.S.D.  
April 1, 2004

*[Signature]*  
ROBERT DAVIS  
PRIMARY EXAMINER  
GROUP 1800-1700

*[Signature] 8/1/04*